



## The empathic migrant: empathy is preserved in African refugees with PTSD

MASSIMILIANO ARAGONA<sup>1</sup>, ANNA MARIA PETTA<sup>2,3</sup>, FLAMINIA KIARIS<sup>3</sup>, EDVALDO BEGOTARAJ<sup>4</sup>, CARLO LAI<sup>4</sup>, GRAZIA FERNANDA SPITONI<sup>3</sup>

1: The National Institute for Health, Migration and Poverty (INMP), Rome (Italy)

2: Crossing Dialogues Association, Rome (Italy)

3: Department of Dynamic and Clinical Psychology, and Health Studies. Sapienza University of Rome (Italy)

**Objectives:** African asylum seekers and refugees arrive in Italy after being exposed to several traumatic experiences as torture, in their own countries and/or in Libya. After the arrival they often present a Post-Traumatic Stress Disorder (PTSD). In this study, we test the hypothesis that patients with PTSD have difficulties in empathic abilities due to the distortion of the interpersonal basic trust induced by traumas.

**Methods:** We compared 20 African patients with PTSD and 20 African healthy controls. Traumatic history and PTSD were assessed both clinically and with Post-Traumatic Checklist for DSM-5 (PCL-5) and List of Migration Experiences (LiMeS). The Interpersonal Reactivity Index (IRI) was used to study empathy on four dimensions: Perspective Taking, Empathic Concern, Fantasy, and Personal Distress.

**Results:** We found no difference in Perspective Taking ( $17.35 \pm 5.25$  vs.  $18.05 \pm 3.69$ ) and Empathic Concern ( $20.65 \pm 4.93$  vs.  $20.15 \pm 4.03$ ), while patients had higher scores on Fantasy ( $16.15 \pm 5.30$  vs.  $11.80 \pm 4.38$ ,  $p < .05$ ) and Personal Distress ( $16.30 \pm 4.04$  vs.  $8.95 \pm 3.72$ ,  $p < .001$ ). Moreover, scores at Fantasy and Perspective Taking were positively correlated to the intrusiveness of post-traumatic symptoms.

**Conclusion:** Contrary to expectations, African asylum seekers and refugees do not react to traumatic experiences with a disruption of empathic capabilities. In our sample, empathy is well preserved and fantasy resonance appears increased. Patients show increased distress when faced to the others' suffering, which we interpret as a possible by-product of post-traumatic personal suffering. The ability to resonate with the other's perspective, emotions and suffering, represent a good basis for projects aimed to improve interpersonal relationships and pro-social behaviors.

**Keywords:** Migration, Refugees, PTSD, Empathy, Social Cognition

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## INTRODUCTION

In the last years Italy has become one of the main countries of arrival for asylum seekers fleeing from Africa. The majority of them come on over crowded boats and small rubber dinghies from Libya, a country where torture and other forms of interpersonal violence are very common (Ali et al., 2015; Medici per I Diritti Umani, 2020). Hence, before the arrival in Italy these asylum seekers have been exposed to several and often repeated traumatic experiences: first, in their countries (push factors may include torture by regimes or interpersonal violence at the social or familial level) and later in Libya. Moreover, risks for life in the Sahara and in the Mediterranean Sea are often

reported as adjunctive traumatizing events. As a consequence, after their arrival in Italy many asylum seekers suffer from psychopathological reactions of which the most frequent is Post-Traumatic Stress Disorder (PTSD) (Mazzetti et al., 2016; Medici Senza Frontiere, 2016; Crepet et al., 2017; Nosè et al., 2018; Mazzetti & Geraci, 2019; Petta, 2019).

As a typical reaction to torture, early phenomenological studies reported relational and interpersonal basic disturbances described as "a significant threat to the *interpersonal encounter* in the sense of Heidegger's "Miteinandersein" and Martin Buber's "I-Thou" relationship, that is, threats to essential interpersonal human

structure” (Doerr-Zegers et al., 1992). This change was reported as a typical sign of late post-traumatic reactions of tortured people, i.e. as part of a complex syndrome which is akin to what is currently debated as complex-PTSD.

These issues were not addressed directly for years, although social and relational problems in tortured individuals and, more generally, in patients with PTSD, were often reported (e.g. Verbosky & Ryan, 1988; Riggs et al., 1998). More recently, one study examined the influence of PTSD symptom clusters on interpersonal functioning and found a role of emotional numbing that moderately sustained the hypothesis of a negative interpersonal cost of traumatic events (Beck et al., 2009). In the same year a review stressed that the impact of “particular social cognition factors relevant to successful social interactions, such as the capacity to empathize and mind read on PTSD trajectories, have not yet been investigated” (Nietlisbach & Maercker, 2009, p.396). As a consequence, in a following study the authors tested the hypothesis that person suffering from PTSD will exhibit reduced empathic abilities when compared to the performance of a non-clinical control group (Nietlisbach et al., 2010). They found reduced empathic contagion in the PTSD group (the most basic component of empathy related to yawning and laughing) but no major group differences in the cognitive component of empathy, i.e., in the tests of social cognitive function. Moreover, they administered Davis’ Interpersonal Reactivity Index (IRI), which covers both cognitive and emotional components with subscales tapping perspective-taking, fantasy, empathic concern, and personal distress (Davis, 1980). The results were not as expected, because of the four dimensions of the IRI, the PTSD group scored significantly higher than the control group only on the Personal Distress subscale (Nietlisbach et al., 2010). A subsequent study on military officers traumatized during a terrorist attack showed that those with PTSD had similar theory of mind abilities but reduced capacity to recognize emotions and empathy, in particular in correctly perceiving and sharing other people’s emotional experiences (Mazza et al., 2012). Another study on earthquake victims found that PTSD subjects

did not differ from controls in cognitive empathy, while they showed an impairment in emotional empathy (Mazza et al., 2015). Finally, Stevens & Jovanovic’s meta-analysis (2019) reported that social cognition was more impaired by interpersonal trauma than by natural disaster.

Based on Henry’s et al. (2016) classification in four principal components (i.e. theory of mind (ToM), social perception, affective empathy, and social behavior), a recent comprehensive review on PTSD and social cognition showed that: a) in existing studies nearly 75% of patients exhibited altered perception of emotions. These included difficulties in processing threatening expressions like anger, fear, or sadness, and a reduction of both intensity and processing speed in the perception of positive emotions such as happiness; b) disturbances were also present in affective empathy, ranging from emotional resonance to more complex empathy such as compassion; c) the disturbed social cognition found in patients with PTSD was due to irritability, anger, impulsivity, and physical aggression (Couette et al. 2020).

To our knowledge, the only study specifically focused on refugees with PTSD was on Bosnian refugees (Schmidt & Zachariae, 2009). The revised version of Reading the Mind in the Eyes Test (Baron-Cohen et al., 2001) was used for this study, patients showing significantly more errors than Danish and Bosnian control groups. Considering that the Bosnian control group had also experienced potentially traumatizing incidents, the authors suggested that the difficulties in reading facial displays of emotion were specific of PTSD (Schmidt & Zachariae, 2009).

Considering that only one study addressed this issue in European refugees, and also that data on Western populations were inconsistent, we projected a preliminary study to test the hypothesis that empathy may be impaired in PTSD refugees coming from Africa. Contrary to our expectations, we did not find impaired empathy in this kind of patients, as reported in a letter summarizing the main findings (Aragona et al., *in press*). The present paper is the extensive report of this preliminary research, focusing on clinical and theoretical consequences.

## MATERIALS AND METHODS

**Participants:** The sample was composed by 20 participants with PTSD and 20 non clinical controls. All the 40 participants were male, came from Africa and lived in Rome.

The clinical group had received a diagnosis of PTSD according to a double criterion: a) a clinical evaluation by a physician expert in transcultural psychiatry who made the diagnosis of PTSD according to the DSM-5 Criteria, and b) a total score at the Post-Traumatic Checklist for DSM-5 (PCL-5) (Weathers et al., 2013) above the cut-off of 33. All subjects were either asylum seekers waiting for the evaluation of their request of international protection to the Italian authorities, or refugees. All of them were forced migrants escaped from violence in their own countries and had crossed Libya, which is a country where re-traumatization typically occurs.

The non-clinical group was constituted by 20 students of theology. They were contacted directly by two authors of this study, those who accepted to enter the research and signed the informed consent were socio-demographically and clinically assessed and then received the same questionnaires as the index group.

Exclusion criteria were the presence of neurological disorders, current suicidal or psychotic symptoms, drugs or alcohol dependence.

**Procedure:** The study was approved (Protocol No. 47/2017) by the Ethics Committee of the Department of Dynamic and Clinical Psychology, Sapienza University of Rome, Italy.

All participants received the same protocol. At the first visit socio-demographic information was collected and a clinical diagnosis was recorded. All patients who accepted to participate signed the informed consent form. In the second phase, patients fulfilled the study questionnaires. Each subject was tested individually in a quiet room, and everyone was free to withdraw from the study at any time. The administration took approximately 45 minutes.

**Measures:** The following questionnaires were administered to all participants. All instruments

were self-administrated but assistance was available in case of difficulties in reading or understanding the meaning of some questions. When needed, the cultural mediators were involved together with at least two researchers, and they had been previously trained on how to administer a questionnaire and clarify questions without influencing the subject's answer.

### *Post-Traumatic Checklist for DSM-5 (PCL-5)*

PCL-5 (Weathers et al., 2013) is a 20 items self-report exploring post-traumatic symptoms pertaining to the DSM-5 diagnosis of PTSD. Each item is scored on a 5-point Likert scale (from 0="Not at all" to 4="Extremely") and the total sum of 33 was used as cut-off. PCL-5 also measures the severity of DSM-5 symptoms clusters: Cluster B explores the intrusive symptoms (resulting from the sum of the score items from 1 to 5); Cluster C explores the avoidance behaviors (items 6 and 7); Cluster D identifies the negative emotions and thoughts (items from 8 to 14); and Cluster E the arousal and reactivity (items from 15 to 20). Psychometric properties are considered good in general, and also in transcultural settings (Ashbaugh et al., 2013; Wortmann et al., 2016; Verhey et al., 2018).

### *List of Migration Experiences (LiMeS)*

The LiMeS (Aragona et al., 2014; Aragona et al., 2018) is a checklist of 59 possible migratory and post-migratory events. Item responses are framed as presence/absence of the event, and the same experience can have occurred before leaving the country, during the journey, and/or in Italy. In case the same event occurred in more than one occasion, multiple ticking is allowed. There are two main factors: a) traumatic experiences (e.g. combat situations, intentional traumas including torture and sexual abuses, witnessing of killing of family members, etc.); and b) living difficulties (e.g. poor access to medical assistance or welfare facilities, discrimination, legal and working problems, etc.). Available languages are Italian, English, French, Spanish, Chinese and Arabic. Early research showed good internal consistency and retest reliability (Aragona et al., 2014).

*Interpersonal Reactivity Index (IRI)*

The IRI questionnaire (Davis, 1980), is composed by 28 items on 5-point Likert scale ranging from 0 to 4. The scoring provides four dimensions: Perspective Taking, Fantasy, Empathic Concern and Personal Distress. The first dimension explores empathy from a cognitive point of view, i.e. the ability to spontaneously adopt the psychological point of view of the others. The second one explores the tendency to identify themselves with the feelings and the actions of figures in books, movies and plays. Empathic Concern evaluates feelings and concerns for other people (“other-oriented”). Finally, the Personal Distress dimension identifies feelings of distress (“self-oriented”) arising when involved in interpersonal relationships. It is one of the most frequently used instruments to study empathy in clinical and non-clinical samples, and it is translated and validated in several languages, showing a robust psychometric performance.

**Statistics:** Data processing was performed using IBM SPSS Statistics 25 for Windows 10.

Descriptive analyses and parametric comparisons (Cohen’s t Student and effect size Cohen-d) were used for main socio-demographic variables.

To examine differences in number of migration experiences, severity of post-traumatic symptoms, and empathy, we run a series of Multivariate Analyses of Covariance (MANCOVA) with schooling level entered as a

covariate. Partial eta square was used to test the effect sizes of each comparison.

The first model included Group (PTSD vs Non clinical) as between subject factor and scores on PCL-5 subscales as dependent variables (Total Score, Cluster B: Intrusive Symptoms, Cluster C: Avoidance, Cluster D: Negative Feelings and Thoughts, Cluster E: Arousal and Reactivity).

In the second model, ‘Group’ (PTSD vs Non clinical) was the between subject factor and LiMEs variables (Before, During and In Italy) were the dependent variables.

In the final set, ‘Group’ (PTSD vs Non clinical) was the between-subject factor and empathy measures (IRI dimensions) were the dependent variables (Perspective Taking, Fantasy, Empathic Concern and Personal Distress).

Finally, Pearson correlations were computed to assess how severity of PTSD was related to empathic abilities.

**RESULTS***Characteristics of participants*

As shown in Table 1, patients in the PTSD group came from different Sub-Saharan countries while a few control subjects were also coming from Mediterranean Africa (2 from Tunisia, 1 from Egypt). All controls were Christian while in the PTSD group there were both Christians and Muslims. Subjects in the control group were all unmarried, while in the PTSD group 9 were unmarried, 8 married, 2 widowed, and 1 divorced. The two groups also differed in reasons to emigrate, typology of journey, and permission

Table 1: Country of provenance

	PTSD Group N (%)	Non clinical Group N (%)
Cameroon	1 (5.00)	0 (0.00)
Democratic Republic of Congo	0 (0.00)	8 (40.00)
Egypt	0 (0.00)	1 (5.00)
Gambia	4 (20.00)	0 (0.00)
Ghana	1 (5.00)	1 (5.00)
Ivory Coast	1 (5.00)	0 (0.00)
Kenya	1 (5.00)	0 (0.00)
Mali	1 (5.00)	0 (0.00)
Nigeria	8 (40.00)	5 (25.00)
Senegal	2 (10.00)	0 (0.00)
Somalia	0 (0.00)	2 (10.00)
Togo	1 (5.00)	1 (5.00)
Tunisia	0 (0.00)	2 (10.00)
Total	20 (100.00)	20 (100.00)

of stay (asylum seekers and refugees in the PTSD group, religion students in the control group).

Differences in age were not statistically significant while controls had a higher educational level ( $17.55 \pm 6.07$  vs.  $10.00 \pm 4.16$  years of study,  $p < .001$ ; *Cohen's d* = 1.45).

### **Migration experiences and post-traumatic symptoms**

Patients in the PTSD group experienced several migration traumas and difficulties at the LiMEs. Such events were recorder before leaving their country, during the journey (where the highest number of negative events was recorded) and after the arrival in Italy. As predictable, the total number of LiMEs events was high in patients ( $44.6 \pm 7.7$ ) and very low in the control group ( $9.4 \pm 10.4$ ). Similarly, scores at the PCL-5 were high in the PTSD group and low in the control group. In particular, the followings are the comparison of the four PCL-5 subscales in patients vs. controls: Intrusive symptoms  $17.3 \pm 8.8$  vs.  $2.8 \pm 3.6$ ; Avoidance  $5.1 \pm 2.2$  vs.  $1.0 \pm$

$1.2$ ; Negative Feelings/thoughts  $14.0 \pm 4.2$  vs.  $2.7 \pm 3.3$ ; Arousal and Reactivity  $10.6 \pm 4.0$  vs.  $2.9 \pm 3.6$ .

All differences were significant.

### **Empathic dimensions**

Our analysis found a significant effect of Group in general: Pilai Trace  $V=0.38$ ,  $F(4, 34)=5.09$ ,  $p=.003$ . The comparison of single dimensions (Table 2) shows that patients with PTSD perform similarly to non-clinical individuals in Perspective Taking and Empathic Concern, while the PTSD group had higher scores on the dimensions Fantasy and Personal Distress.

Finally, as shown in Table 3, we did not find the expected significant correlations between PTSD severity (expressed as scores at the PCL-5 dimensions), and altered empathic abilities. Conversely we found a significant positive correlation between scores at the PCL-5 intrusive symptoms and the IRI dimensions Perspective Taking and Fantasy.

Table 2: Empathic dimensions

IRI Subscales	PTSD Group N=20	Non clinical Group N=20	F	p-value	$\eta p^2$
PerspectiveTaking	17.35±5.25	18.05±3.69	0.624	.435	.017
Fantasy	16.15±5.30	11.80±4.38	5.886	.020	.137
EmpathicConcern	20.65±4.93	20.15±4.03	3.746	.061	.092
Personal Distress	16.30±4.04	8.95±3.72	19.806	.000	.349

Note: Values are expressed in mean and standard deviation ( $\mu \pm DS$ ).

Table 3: Pearson correlations among post-traumatic dimensions and empathic abilities

PCL-5 Dimensions	Interpersonal Reactivity Index			
	Perspective Taking	Fantasy	Empathic Concern	Personal Distress
Intrusion symptoms	.53*	.47*	.37	.16
Avoidance	-.08	.10	.03	-.04
Negative thoughts or feelings	.22	.26	-.04	-.21
Arousal and reactivity	.09	-.20	.09	.20

Note: \*= $p < .05$

## **DISCUSSION**

Based on early studies focused on patients with PTSD, we expected our patients to have impairment in empathic dimensions compared to a control group of African students of theology. However, our results do not confirm this hypothesis, patients with PTSD having similar scores in Perspective Taking and Empathic Concern, an increased tendency to identify themselves with the feelings and actions of fictional characters (Fantasy), as well as high

levels of experienced discomfort in response to distress in others (Personal Distress).

The first dimension (Perspective Taking) is a measure of the cognitive component of empathy, i.e. the capability of transposing oneself in the other's point of view in order to understand how he sees things from his perspective. It has been considered akin to the Theory of Mind construct (Nietlisbach&Maercker, 2009). In theory, traumatized patients could have difficulties

because severe trauma can disrupt interpersonal trust and create a shared world (*Mitwelt*, in the phenomenological tradition) in which the others are seen as possible source of threat or they are not viewed as persons offering possibilities for interaction (Wilde, 2019). Our data show that Perspective Taking is not hampered in these patients. On the contrary, an increase of intrusive post-traumatic symptoms seems related to an increased tendency to adopt the other's point of view. Similar levels of Perspective Taking in PTSD and controls were already found in previous studies with non-migrant patients (Nietlisbach et al., 2010; Mazza et al., 2015), so our research extends this finding to African asylum seekers and refugees.

The dimension Empathic Concern assesses the capability to experience feelings of compassion for the less fortunate others, for example with questions like "I often have tender, concerned feelings for people less fortunate than me". It can be considered as a way to measure the emotional component of empathy, i.e. the emotional resonance to the other's feelings. In theory a reduction of empathic concern for the other's misfortunes could be present in PTSD patients, and particularly in those who were victims of interpersonal violence, because as a defensive reaction they are expected to withdraw from interpersonal relationships, avoiding to be involved in situations that may remind the experienced trauma. Also, being disturbed by recurrent intrusive thoughts, they are expected to be strongly focused on their own experience and to have less resonance with the other's problems. Our study does not confirm this expectation, our PTSD patients having similar levels of empathic concern than members of the control group. A similar finding was found in a previous study (Nietlisbach et al., 2010), although they also found a positive correlation between intrusive symptoms of PTSD and Empathic Concern, a finding which is not confirmed in our sample. Other studies apparently contrast our results, having reported deficits in explicit emotional empathy (Mazza et al., 2015) and a significant impairment in emotion-recognition tasks, specifically in reading displays of emotions in faces/eyes (Mazza et al., 2012; Schmidt

& Zachariae; 2009). In the case of Mazza et al.'s (2015) results, it shall be considered that their sample was very small and the instrument used for the assessment was different from ours. The tasks of the other two studies explored a basic level of emotional empathy than the level assessed in our study, so the difference could be explained by Nietlisbach et al.'s (2010) suggestion that patients with PTSD might present a pattern of dissociation between different empathic abilities, with impairment in non-reflective, basic abilities, but no impairment in reflective components.

Regarding the dimension called Fantasy, a previous study had not found differences between subjects with and without PTSD (Nietlisbach et al., 2010), while in our study asylum seekers and refugees with PTSD showed increased scores in this dimension, and a significant positive correlation between the intrusiveness of PTSD symptoms and the Fantasy scores. Hence, contrary to expectations our patients appear more prone than controls to transpose themselves in the suffering of fictional characters, a fact that opens interesting possibilities for the planning of rehabilitation procedures using narratives and movies.

Finally, we also found increased scores in the dimension Personal Distress, this result being in line with Nietlisbach et al.'s (2010) study. In theory, this dimension should measure a sort of emotional contagion, i.e. the levels of distress the patients experience in response to difficult situations involving other persons. However, our tentative hypothesis is that, more than reflecting increased empathic abilities, the higher scores we found at the dimension Personal Distress might reflect a facilitation effect of the emotional reactivation occurring when salient stimuli (in particular those reminding their own previous suffering) are observed in other persons. Accordingly, future studies should study the relationship between this dimension and the possible modulatory effect exerted by other phenomena like alertness, fears, anger, irritability, sadness, etc.

Among possible biases, we considered the different educational level of our two groups. In fact, previous studies suggested that persons

with higher educational levels may be more capable of social intelligence and interpersonal competence (Schmidt & Zachariae, 2009). To reduce this risk we included educational level as covariate in the analysis of data. However, it shall be emphasized that if present, the effect of this difference was expected to be in the direction of increased empathic abilities in the control group. As a consequence, the fact that in our study the reverse was the case shall be considered as an indirect sign of robustness of the results. Another possible bias was related to the self-evaluation instrument used to measure empathy, which does not allow measuring the empathic process directly but only reflexively (and we know that subsequent reflection may bias the recollection of emotional features). We also considered the possibility of cultural biases that were partly minimized using a control group of individuals coming from the same geographic areas. However, considering that people with different economic and school level may be exposed to different cultural environments within the same country, the possibility of this bias could not be completely avoided.

## REFERENCES

- Ali F, Chemlali A, Koch Andersen M, Skar M, Ronsbo H, Modvig J. (2015) Consequences of torture and organized violence: Libya needs assessment survey (Report N.8). Dignity International Publication Series.
- Aragona M, Camillo da Silva E, Ait Souabni F, Boubker F, Mazzetti M, Geraci S. (2018) Translation and cultural adaptation of the Arabic version of the List of Migration Experiences (LiMEs). *Dial Phil Ment Neuro Sci*, 11:12-18.
- Aragona M, Geraci S, Mazzetti M. (Eds.) (2014). *Quando le ferite sono invisibili. Vittime di tortura e di violenza: strategie di cura*. Pendragon, Bologna.
- Aragona M, Petta AM, Kiaris F, Begotaraj E, Lai C, Spitoni GF. (*in press*) Empathy, PTSD, and Migration in African Refugees. *Psychiatry*.
- Ashbaugh AR, Houle-Johnson S, Herbert C, El-Hage W, Brunet A. (2016) Psychometric validation of the English and French versions of the Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5). *PLoS One*, 11(10):e0161645.
- Baron-Cohen S, Wheelwright S, Hill J, Raste Y, Plumb I. (2001) The "Reading the Mind in the Eyes" Test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism. *J Child Psychol Psychiatry*, 42:241-253.
- Beck JG, Grant DM, Clapp JD, Palyo SA. (2009) Understanding the interpersonal impact of trauma: Contributions of PTSD and depression. *J Anxiety Disord*, 23:443-450.
- Couette M, Mouchabac S, Bourla A, Nuss P, Ferreri F. (2020) Social cognition in post-traumatic stress disorder: A systematic review. *Br J Clin Psychol*, 59:117-138.
- Crepet A, Rita F, Reid A, Van den Boogaard W, Deiana P, Quaranta G, Barbieri A, Bongiorno F, Di Carlo S. (2017). Mental health and trauma in asylum seekers landing in Sicily in 2015: a descriptive study of neglected invisible wounds. *Confl Health*, 11:1-11.
- Davis MH. (1980) A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10:85-100.
- Doerr-Zegers O, Hartmann L, Lira E, Weinstein E. (1992) Torture: psychiatric sequelae and phenomenology. *Psychiatry*, 55:177-184.
- Henry JD, von Hippel W, Molenberghs P, Lee T, Sachdev PS. (2016) Clinical assessment of social cognitive function in neurological disorders. *Nat Rev Neurol*, 12:28-39.
- Mazza M, Giusti L, Albanese A, Mariano M, Pino MC, Roncone R. (2012) Social cognition disorders in military police officers affected by posttraumatic stress disorder after the attack of An-Nasiriyah in Iraq 2006. *Psychiatry Res*, 198:248-252.
- Mazza M, Tempesta D, Pino MC, Nigri A, Catalucci A, Guadagni V, Gallucci M, Iara G, Ferrara M. (2015) Neural activity related to cognitive and emotional empathy in post-traumatic stress disorder. *Behav Brain Res*, 282:37-45.

## CONCLUSION

In conclusion, it seems that our group of African asylum seekers and refugees did not react to traumatic experiences with the expected disruption of empathic capabilities. On the contrary, cognitive and emotional empathy were well preserved, fantasy resonance was increased, and there was high distress when faced to the others' suffering.

Our interpretation is that increased distress in these specific patients may be not a sign of empathy but an index of post-traumatic hyperarousal. However, the other three subscales might capture (with all the needed interpretive caution) some features related to empathy, and in this case the evidence is that African refugees with PTSD are open to resonate with the other's perspective and emotions.

Considering that the ability to create and maintain valid interpersonal relationships is a key resilience factor in post-resettlement course, this finding is encouraging and suggests to implement pro-social rehabilitation projects for PTSD patients.

Mazzetti M, Geraci S. (2019). Immigrazione e salute mentale. Violenza, psicotraumatologia, politiche per la salute e tutela assistenziale. In: Perocco F. (Ed.) Tortura e migrazioni. Edizioni Ca' Foscari, Venezia: 380-402.

Mazzetti M, Aragona M, Monti MC. (2016) Immigrazione e salute mentale nell'Italia del 2016. In: ANCI, Caritas Italiana, Cittalia, Fondazione Migrantes, Servizio Centrale dello SPRAR & UNHCR (Eds.) Rapporto sulla protezione internazionale in Italia 2016. ANCI, Caritas Italiana, Cittalia, Fondazione Migrantes, Servizio Centrale dello SPRAR & UNHCR:267-286.

Medici per i Diritti Umani (Ed.) (2020) La fabbrica della tortura. Rapporto sulle gravi violazioni dei diritti umani dei migranti e dei rifugiati in Libia (2014-2020). Medici per i Diritti Umani, Roma.

Medici Senza Frontiere (Eds.) (2016) Traumi ignorati. Richiedenti asilo in Italia: un'indagine sul disagio mentale e l'accesso ai servizi sanitari territoriali. Medici Senza Frontiere, Roma.

Nietlisbach G, Maercker A. (2009) Social cognition and interpersonal impairments in trauma survivors with PTSD. *J Aggress Maltreat Trauma*, 18:382-402.

Nietlisbach G, Maercker A, Rössler W, Haker H. (2010) Are empathic abilities impaired in Posttraumatic Stress Disorder? *Psychol Rep*, 106:832-844.

Nosè M, Turrini G, Imoli M, Ballette F, Ostuzzi G, Cucchi F, Padoan C, Ruggeri M, Barbui C. (2018) Prevalence and Correlates of Psychological Distress and Psychiatric Disorders in Asylum Seekers and Refugees Resettled in an Italian Catchment Area. *J Immigr Minor Health*, 20:263-270.

Petta AM. (2019) Indagine sui bisogni sanitari e di salute mentale dei rifugiati e richiedenti asilo ospiti dei centri di accoglienza nel territorio di Roma. Crossing Dialogues Association, Roma.

Riggs D, Byrne C, Weather F, Litz B. (1998) The quality of the intimate relationships of male Vietnam veterans: problems associated with posttraumatic stress disorder. *J Trauma Stress*, 11:87-101.

Schmidt JZ, Zachariae R. (2009) PTSD and impaired eye

expression recognition: a preliminary study. *J Loss Trauma*, 14:46-56.

Verbosky S, Ryan D. (1988) Female partners of Vietnam veterans: stress by proximity. *Issues Ment Health Nurs*, 9:95-104.

Verhey R, Chibanda D, Gibson L, Brakarsh J, Seedat S. (2018) Validation of the posttraumatic stress disorder checklist - 5 (PCL-5) in a primary care population with high HIV prevalence in Zimbabwe. *BMC Psychiatry*, 18:109.

Weathers FW, Litz BT, Keane TM, Palmieri PA, Marx BP, Schnurr PP. (2013) The PTSD Checklist for DSM-5 (PCL-5). Scale available from the National Center for PTSD at [www.ptsd.va.gov](http://www.ptsd.va.gov)

Wilde L. (2019) Trauma and intersubjectivity: the phenomenology of empathy in PTSD. *Med Health Care Philos*, 22:141-145.

Wortmann JH, Jordan AH, Weathers FW, Resick PA, Donnanville KA, Hall-Clark B, Foa EB, Young-Mc Caughan S, Yarvis JS, Hembree EA, Mintz J, Peterson AL, Litz BT. (2016) Psychometric analysis of the PTSD Checklist-5 (PCL-5) among treatment-seeking military service members. *Psychol Assess*, 28:1392-1403.

#### Corresponding Author:

Massimiliano Aragona  
INMP  
Via di San Gallicano 25a, 00153 Roma (Italy)

Email: [massimiliano.aragona@inmp.it](mailto:massimiliano.aragona@inmp.it)

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